

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
  
2. Authorization for the examiner's amendment was given in a telephone interview with Mr. Mark F. Niemann, Registration No. 61,817 on July 22, 2008.
  
3. Amend the claims as follow:

1. (Previously Presented) An apparatus comprising a computing device having one or more processors and computer-readable storage media for interacting with a target software product having user interface functionality, comprising:

script execution logic configured to execute a script that involves interaction with the user interface functionality of the target software product; and

manipulation tool logic that provides functionality for use by the script application logic in interfacing with the target software product,

wherein the manipulation tool logic includes search logic configured to search for a user interface object using a plurality of different selectable search strategies and comprises event handling logic configured to monitor a firing of the user interface object and execute a callback function upon the occurrence of a specified event caused by the firing of the user interface object, wherein the event handling logic is further configured to block the execution of the script execution logic until a second specified event has occurred within a specified timeout period, wherein error processing is performed if the second specified event does not occur within the specified timeout period, the callback function executing a prescribed function upon the occurrence of the specified event,

wherein one of the search strategies is a flag-based attribute search strategy that involves comparing a specified property value and qualifying flag information with information associated with the user interface object, wherein the flag information is configured to provide a filtering function in a search by restricting results of the search to a certain subset of results based on the flag information.

2. (Original) An apparatus according to claim 1, wherein the manipulation tool logic is configured to interface with the target software product using a window-type interface and an accessibility interface.

3. (Original) An apparatus according to claim 1, wherein one of the search strategies is an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object.

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Currently Amended) An apparatus according to claim [[6]] 1, wherein the second specified event pertains to a firing of a specified user interface object or the user interface object.

8. (Canceled)

9. (Canceled)

10. (Previously Presented) An apparatus comprising a computing device having one or more processors and computer-readable storage media for interacting with a target software product having user interface functionality, comprising:

script execution logic configured to execute a script that involves interaction with the user interface functionality of the target software product; and

manipulation tool logic that provides functionality for use by the script application logic in interacting with the target software product,

wherein the manipulation tool logic includes search logic configured to perform a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with a second user interface object or the user interface object, wherein the flag information is configured to provide a filtering function in a search,

wherein the manipulation tool logic further comprises event handling logic configured to block the execution of the script execution logic until a specified event has occurred within a specified timeout period, wherein error processing is performed if the specified event does not occur within the specified timeout period, and

wherein the event handling logic is further configured to monitor a firing of a user interface object and execute a callback function upon the occurrence of the specified event or a second specified event caused by the firing of the user interface object, the callback function executing a prescribed function upon the occurrence of the specified event or the second specified event.

11. (Previously Presented) An apparatus according to claim 10, wherein the specified event pertains to a firing of a second user interface object.

12. (Canceled)

13. (Original) An apparatus according to claim 10, wherein the manipulation tool logic is configured to interface with the target software product using a window-type interface and an accessibility interface.

14. (Previously Presented) An apparatus according to claim 10, wherein the manipulation tool logic includes search logic configured to perform an SQL-type query string search strategy that involves comparing a specified string with information associated with a second user interface object or the user interface object.

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Currently Amended) A method for interacting with a target software product having user interface functionality, comprising:

executing a script that involves interaction with the user interface functionality of the target software product; and

interfacing with a manipulation tool library to carry out at least two functions specified in the script, wherein the at least two functions include:

searching for a user interface object using a selectable one of a plurality of different search strategies provided by the manipulation tool library, wherein one of the selectable search strategies is a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with the user interface object, wherein the flag information is configured to provide a filtering function in a search; and

executing a callback function upon the occurrence of a specified event within a specified timeout period caused by a firing of the user interface object, the callback

function executing a prescribed function upon the occurrence of the specified event and blocking the execution of the script until the specified event has occurred within the specified timeout period and generating an error message if the specified event does not occur within the specified timeout period.

21. (Previously Presented) A method according to claim 20, wherein the act of interfacing with a manipulation tool library comprises interfacing with the target software product using a window-type interface and an accessibility interface.

22. (Original) A method according to claim 20, wherein one of the selectable search strategies is an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object.

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Previously Presented) A method for interacting with a target software product having user interface functionality, comprising:

executing a script that involves interaction with the user interface functionality of the target software product; and

interfacing with a manipulation tool library to carry out at least two functions specified in the script, wherein the at least two functions include:

event handling for blocking the execution of the script until a specified event has occurred within a specified timeout period and generating an error message if the specified event does not occur within the specified timeout period; and

executing a callback function upon the occurrence of a second specified event caused by a firing of a user interface object, the callback function executing a prescribed function upon the occurrence of the second specified event, wherein another function of the manipulation tool library comprises searching using a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with the user interface object, wherein the flag information is configured to provide a filtering function in a search.

30. (Previously Presented) A method according to claim 29, wherein the specified event pertains to a firing of a specified user interface object.

31. (Canceled)

32. (Previously Presented) A method according to claim 29, wherein the act of interfacing comprises interfacing with the target software product using a window-type interface and an accessibility interface.

33. (Previously Presented) A method according to claim 29, wherein another function of the manipulation tool library comprises searching using an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object.

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Canceled)

38. (Canceled)

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571)272-3776. The examiner can normally be reached on 8:30am-6:00pm Monday-Thursday and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/  
Supervisory Patent Examiner, Art Unit 2195

/Qing-Yuan Wu/  
Examiner, Art Unit 2194